

ABSTRACT

A method of searching a database for a prefix
representing a destination address including loading two trees
of tables, each tree of tables having a large table at a root
5 branching to small tables and traversing the two tables of
trees in parallel to find a match of an entry to the prefix.
An entry includes a router pointer representing the
destination address and a pointer to a next small table. The
small tables include prefix match fields for indexed table
10 entries, a population count of pointers and hidden prefix
entries that hold shorter prefix route entry pointers.

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